

## ABSTRACT OF THE DISCLOSURE

The embodiment of the present invention comprises a device-internal data flow organization coupled with a wireless communications medium access control protocol for a set of WLAN "Multiprotocol Devices", each containing a 2.4 and 5 GHz frequency band-agile CCK and OFDM modulation capable radio, such that the devices may support simultaneous IEEE 802.11a and 802.11b/g-compliant Access Point functionality. The set includes a "Multiprotocol Access Point" that bridges communications from IEEE 802.11a and/or IEEE 802.11b/g compliant WLAN client devices, and other Multiprotocol Devices, to the wired LAN distribution system. Also included is a "Multiprotocol Repeater" that relays communications from the above client and Multiprotocol devices wirelessly to another Multiprotocol Device. The set also includes a "High Capacity Multiprotocol Repeater" that can relay a higher volume of communications from IEEE 802.11a, b or g devices wirelessly to another Multiprotocol Device.